

Co-Chairs Gerretana and Ritter, Vice-Chairs Slossberg and Lyddy, and all distinguished members of the Public Health Committee:

My name is Louis Iannotti. I am a North Haven, Connecticut resident. I am here in *strong support* of HB 5514, an Act Concerning Various Revisions to the Public Health Statutes. I am specifically in support of Sec 22 which deals with increasing access to AEDs on college campuses.

I have been involved in the Defibrillator industry for the past 10 years. Automated External Defibrillators (AED's) have been developed to save lives by treating out of hospital Sudden Cardiac Arrest (SCA). SCA is an electrical malfunction of the heart and is not a heart attack. SCA does not discriminate. It can affect anyone regardless of age, gender or race. There is a misconception that SCA only affects the elderly. Please find attached a Memoriam page from the Sudden Cardiac Arrest Association website. There are seven memorials on this page. Five of the seven are as follows:

Olivia Hoff, 15 yrs old – Cause of death SCA

Jorge Herrera, 29 yrs old – Cause of death SCA

Jimmy & Crissy Renfrow, 22 & 24 yrs old – Cause of death SCA

Ryan Clarke, 30 yrs old – Cause of death SCA

SCA Facts:

- Sudden Cardiac Arrest kills more than 325,000 Americans each year-more than car wrecks, cancer, handguns, house fires and AIDS...COMBINED!
- Currently only 5% of people survive Sudden Cardiac Arrest
- Every minute that passes without defibrillation lowers a person's chances of survival by an estimated 10%
- National EMS response time is 8.5 minutes to respond to ANY emergency
- The American Heart Association recommends that defibrillation from an AED should occur within 3 minutes to have the greatest chance to resuscitate a victim of SCA
- Survival rates can increase to as high as 90% if treatment is initiated with an AED within the first minutes following the arrest.

AED's are easy to use, are relatively inexpensive (\$1000-\$1200) and save lives. For a college or university in the state of Connecticut not to have them, is bordering on a case of gross negligence.

TIME

Monday, May. 07, 2007

Saving Athletes from Cardiac Arrest

By Carolyn Sayre

It happens all too often; every three days to be exact. In the middle of throwing a curveball or catching a pass, a young athlete dies of sudden cardiac arrest — an abrupt loss of heart function that affects more than 400,000 people in the U.S. and is the leading cause of death in competitive athletes.

Every so often, we hear about it on the news. A young man or woman who appears to be the picture of health and vigor has their life tragically cut short. But in reality, these incidents happen more than we realize and are possibly preventable.

For years, the medical community has thought that only about 20 fatal cases of sudden cardiac arrest occurred each year in the U.S. among young athletes. But new research presented in November 2006 by Dr. Barry Maron, director of the Hypertrophic Cardiomyopathy Center at the Minneapolis Heart Institute Foundation, at the American Heart Association conference shows that the number of deaths among those athletes under 35 is nearly six times higher. "This is still an underestimate," Maron says. "It is real public health problem." And those are just the cases we know about: the ones that are picked up by local TV stations and printed in the newspaper. In the absence of a government subsidized national registry, there is no telling just how high the number really is. ([See pictures of the college dorm's evolution.](#))

The disease itself is as mysterious as its incidence. Unlike many heart problems indicated by symptoms or murmurs, the conditions that cause sudden cardiac arrest usually do not show up during a physical or an athletic screening. That was certainly the case for Davis Nwankwo, a basketball player from Vanderbilt University who collapsed suddenly last year during practice and was found later to have hypertrophic cardiomyopathy, a condition that causes the heart muscles to thicken. "There were no warning signs at all," says Michael

Meyer, an athletic trainer who saved Nwankwo's life using an automatic external defibrillator (AED), a portable electronic device that stops cardiac arrhythmia by shocking the heart.

In the absence of symptoms, 95% of all sudden cardiac arrest victims will die on the scene. You can try to call for help, but in these dire cases, there isn't much time. It takes the average Emergency Medical Service team approximately 6 to 12 minutes to respond to any type of call, but with every minute that passes the chance of survival of sudden cardiac arrest decreases by 7 to 10%, according to the American Heart Association. ([See pictures of college mascots.](#))

As a result, the U.S. National Athletic Trainer's Association and the Inter-Association Task Force recently recommended in the *Journal of Athletic Training* that every school in the country, public and private, have an AED on site. "We all wear life vests in the water, just in case something crazy does happen," says Chuck Kimmel, the President of the National Athletic Trainers' Association. "The AED is the cardiac life vest."

And it works. More than 70% of all sudden cardiac arrest victims are saved by defibrillators. Laura Friend, the cofounder of Parent Heart Watch, an advocacy group that helps to raise awareness and protect children from sudden cardiac death, knows that percentage all too well. Three years ago, she lost her 12-year-old daughter Sarah at a water park in Texas from the same condition as Nwankwo's. An AED might have saved Sarah's life. "It is an epidemic," Friend says. "When are we going to realize we are losing too many kids?"

Only nine states have laws in place that require an AED in any type of school. And most of those laws only apply to high schools, not colleges or universities. Struck by the deaths of four children in only two months last September and a total 15 deaths that same year, Texas recently passed the most comprehensive AED bill in the country, requiring every private, elementary, middle and high school in the state to have a defibrillator and a staff member trained to use it. "When the sixteenth child was saved by a defibrillator, the Governor finally woke up and said we do have a problem," Friend says. ([See pictures of eighth-graders being recruited for college basketball.](#))

More importantly, the Texas bill also requires that the AED be available in a reasonable amount of time and be within reach of the athletes. "An AED only answers half of the problem if it is locked away in the nurse's office," says Dr. Jonathan Drezner, co-chair of the

Inter-Association Task Force Consensus Statement. "I see cases all the time where an athlete collapses and the school doesn't know where the AED is."

So what's the holdup? Like most problems, it boils down to simple dollars and cents. Schools just don't want to pay the money. The average AED now costs about \$1,500 and some are even available for less than a grand. But buying the equipment isn't the only hurdle, they also need to train someone to use it. "Money is a big problem," says Vanderbilt's Meyer, whose college has since bought ten additional defibrillators.

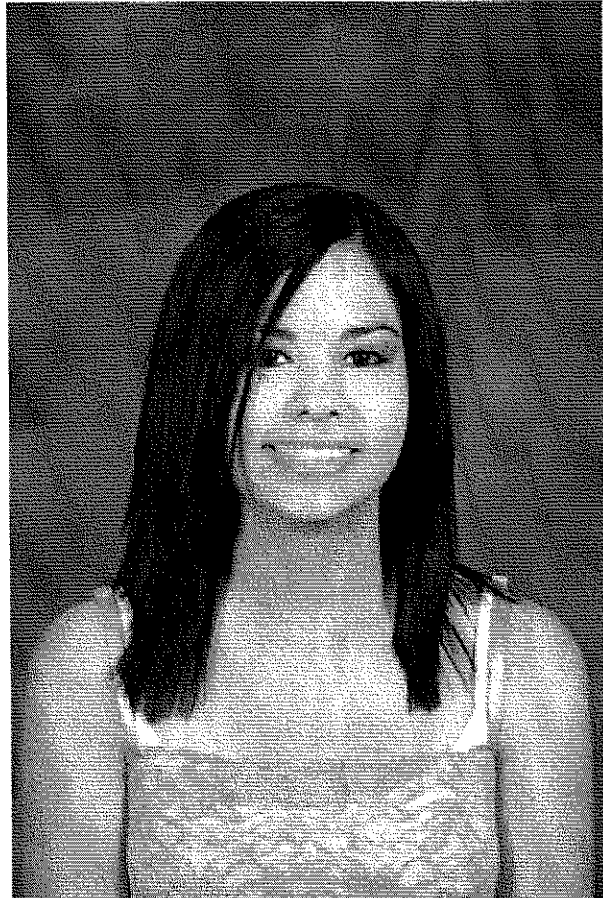
In Nwankwo's case, it was a small price to pay. The Vanderbilt junior, who still plays on the team and helps coach, says: "It could happen anytime to anyone."

Olivia Hoff

June 27, 1989 – Olivia Corinne Hoff was born into this world.

April 22, 2004 – Olivia died from sudden cardiac arrest.

Olivia was the perfect picture of health, so I thought. She was always involved in sports and cheerleading; so of course there could be nothing wrong with my daughter. She was so outgoing, always wanted to ride the fastest roller coaster, never afraid of anything. My daughter was looking forward to the future. She was thinking about becoming a foreign exchange student. She was also learning how to play the guitar because she wanted to be in an "all girl band". After Olivia's death, I found some songs she had written. My daughter was so full of life and had so many plans; but her life ended too soon. Little did I know that Easter Sunday, April 11, 2004, would be Olivia's last day alive. As I look back, I can remember what a wonderful day we had with all of our family. Olivia looked so pretty. I can still see her smile.



April 12, 2004, Olivia went into sudden cardiac arrest and was on life support. Ten days later, April 22, 2004, the doctors told us that Olivia no longer had any brain activity, Olivia's body was slowly starting to shut down. It was time to take my baby girl off the breathing machine. My husband and I were faced with a decision no parent should have to make, we had to let our Olivia go. The nurses allowed me to clean Olivia for the last time. I changed and cleaned her the way I did when she was a baby. I brushed her hair, kissed her perfectly polished "pink toes" and told her it was time to go home. We watched and cried as Olivia took her last breath.

April 22, 2004, Olivia was taken off life support and became my Angel in Heaven.

My daughter was an organ donor. On April 27, 2004, a 4-month old girl in Maryland was the recipient of Olivia's right cornea and a 29-year old man in Texas received the left cornea.

Olivia's heart valves were normal. Her heart valves were implanted into a 2-year old boy August, 2004.

Olivia's gift gave three people a chance at a better life.

Some people only dream of angels but I've held an angel, Olivia, in my arms.

Jorge Herrera



The morning of March 12, 2011 my 29 year old husband woke up with plans to buy a swing set for our then 14 month old daughter. Our sweet girl was the light of his eye. We were also six months pregnant with our first son. Jorge was beyond excited for our growing family. He was excelling in his career as an attorney and loved by countless friends and family. If I could say anything about my husband, it would be that his short life was overflowing with joyous memories. He valued experiences and great quality time with those he loved. He possessed a laugh that was very distinct and so infectious!

Our perfect world shattered in the blink of an eye that day. I will never forget his voice as he yelled out for me. I found him collapsed on our bed with our innocent baby girl tightly wrapped in his arms. I find comfort knowing he left this world hugging his princess. My husband was healthy. His death was unexpected and sudden. The autopsy did reveal some mild cardiomegaly, though not significant enough to cause his death. In honor of my husband's memory I look forward to educating others about Sudden Cardiac Death.

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Crystal Ryan

"Be kinder than necessary, for everyone you meet is fighting some kind of battle."

Jimmy and Crissy

Jackie Renfrow

Like all parents, I worried about my children. As Jimmy and Crissy were growing up they both suffered what we thought of as seizures. I worried about them, but I knew that these seizures were part of my family's medical history. Jimmy and Crissy took the medications they were prescribed, and I thought they would live normal, productive lives. I was thrilled when Jimmy got married and had a beautiful daughter.



Jackie Renfrow's son Jimmy

My optimism was shattered by a phone call I received April 15, 2000. Jimmy was having a seizure, could I come? That call was followed by another call telling us that Jimmy had died of sudden cardiac arrest.

He was just 22 years old. He left behind a wife and a two-year-old daughter.

After that, I was so afraid for Chrissy. When she became pregnant, I was more worried than ever. My own seizures had increased after the births of my children and I was afraid this would happen to her, too.

Chrissy spoke with her doctor about my concerns, and he did an MRI, blood work, and an EEG. However, he didn't do an EKG, and it turns out that was the test that should have been done.

Chrissy gave birth to a baby girl, Jessica, Nov. 23, 2001. She was thrilled to be a mom. I still couldn't shake the feeling that something was going to go wrong. Everyone said this was because I was still suffering from Jimmy's death the year before.



Jackie Renfrow's daughter, Crissy

On July 25, 2002, I received a call saying that Crissy had passed out and her husband couldn't get her to come to. When I arrived at the hospital the doctor took us into a room and told us that Chrissy was gone. They were so sorry. Like Jimmy, she was a victim of sudden cardiac arrest.

I couldn't believe that this was happening. How could I lose both of my children to something that no one could explain?

It was about 10 months after Crissy died that my mom was rushed to the hospital for what we thought was a panic attack. In her case, all the necessary tests were done and we discovered that she has a medical condition called Long QT syndrome. It's a heart rhythm abnormality that, if left untreated or not treated properly, can cause seizures and sudden cardiac death.

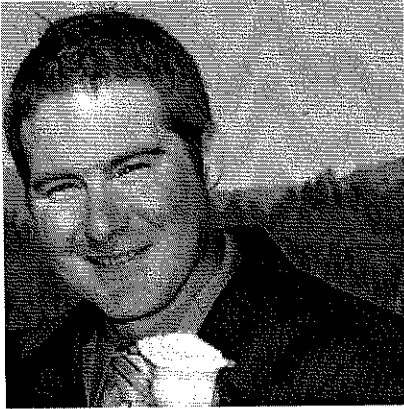
Long QT syndrome is hereditary. I have it, and so do my two granddaughters. So did my Jimmy and Crissy. It turns out that a simple EKG test could have saved my children's lives.

I'm now doing everything I can to make sure that other families find out about Long QT syndrome so their children can get diagnosed and treated. And I want my community to have automated external defibrillators (AEDs) available so that when Long QT syndrome leads to sudden cardiac arrest, it doesn't have to be fatal.

I've started a chapter of the Sudden Cardiac Arrest Association in Indianapolis and am working with Cardiac Science, doctors, parents, and others to promote heart health. In memory of Jimmy and Crissy and on behalf of my grandchildren, I'm going to make sure that other families with Long QT syndrome are spared our losses.

Read about Jackie's efforts to encourage youth heart exams in [this IndyStar](#)

Ryan Clarke



The light of my life was extinguished on March 17, 2011. My son, Ryan, fell victim to sudden cardiac arrest. He was healthy, athletic and extremely active. He turned 30 on Monday and died on Thursday. My last memory of him alive was him pulling away my house in his car, birthday cake in tow, with his window down he waved to me and said "Love you Mom". The next time I saw him the EMS was doing CPR and using the AED. It was too late though at least 8 minutes had gone by without any care. My heart is so broken and I am looking so hard for a way to heal it. Ryan had been married for 1 year 9 months to the love of his life Gina. Prior to that time he worked as a firefighter and EMT and had the opportunity to save many lives. He wasn't rich or famous. He was Ryan and I am so proud of the man he became. His autopsy was completely normal, nothing abnormal at all and that makes it even harder to accept.